GridBeyond™

To:

SEM Committee

Leigh.Greer@uregni.gov.uk

gkaur@cru.ie

3015 Lake Drive
Citywest Business Park
Dublin 24
Ireland

T: +353 1 524 0736
E: service@endeco-technologies.com
www.endeco-technologies.com/gridbeyond

26th August 2022

Re: SEM-22-036 Enduring Solution to Enable Energy Payments in the Balancing Market for DSUs –A Consultation

Dear SEM Committee,

GridBeyond would like to take this opportunity to respond to the consultation paper Enduring Solution to Enable Energy Payments in the Balancing Market for DSUs. GridBeyond is a world leading Irish business providing intelligent Energy-as-a-Service to tackle the challenges businesses face as they move towards a Net Zero future. We manage over 1.5 GW of load, over 60 MW of battery storage, across over 400 client sites. We operate in the energy markets of Europe, North America, Asia and Australia. We are a leading demand aggregator Ireland, and have provided capacity to the Irish grid through controlling Industrial demands for 10 years.

GridBeyond are members of and fully support the responses of the Demand Response Association of Ireland's (DRAI) response. This response reiterates the statements in the DRAI response. We fully welcome this consultation and the opportunity to provide feedback.

DSUs while contributing to stability of the grid and security of supply are not correctly renumerated for the services they provide. Under the current Interim Solution for DSUs, since each dispatch of a DSU requires the unit to absorb its short run marginal cost (SRMC), unless the imbalance price exceeds the strike price, the financial incentive to be available for dispatch is absent. This issue is at the core of what needs to be addressed by the design of a mechanism for energy payments for DSUs in SEM. The Phase 1 and Phase 2 approach outlined by SEMC would provide the signal to demand aggregators to seek out customer load types not currently incentivised under the energy market rules, and would help to increase demand customer participation in DSUs.

GridBeyond echoes DRAI's feedback to the consultation and agrees that the Phase 1 solution which maintains the existing 'interim solution' design is practical and presents a means of fairly remunerating DSUs at all times for dispatch, without the need for extensive systems or rules changes and associated long timeline to implement.

GridBeyond supports the current approach of using the Imperfections Charge and the socialisation fund to support the funding of the energy payments into Phase 1.

Question 1: The SEMC is keen to hear stakeholders' views on the continuation of dispatched quantity as a suitable proxy for metered quantity for an extended interim period (until phase 2 is live), acknowledging the absence of evidence during the first year in which 'phase 1' will be in place.

The use of making the Metering Quantity (QM) equal to the Dispatch Quantity (DQ) has been a welcome approach in addressing the concern over difference payments during scarcity events. We fully support the continued approach of DQ=MQ.

Regarding performance monitoring, a regime is currently in place and effective between ourselves and the TSO. A line of communication is in place already in the event performance is regarded as below the required response. When units are queried regarding performance an internal investigation takes place to rectify any issues and communicated to the TSO. Action plans are put in place to rectify any issues, monitoring is continuous and the line of communication with the TSO remains open. Therefore, there is no risk of "an absence of evidence" during the first year of the proposed Phase 1 implementation as this regime of performance monitoring would continue. We acknowledge, however, that processes and reporting on this by the TSO many be enhanced or formalised further during the first year of operation.

Question 2: Do stakeholders have a view on the extent of industry code or system modifications/ time involved to develop and implement phase 1?

GridBeyond has no view on the extent of code or system modifications required to implement Phase 1.

Question 3: Is 12 months an appropriate period of time over which to assess effectiveness of dispatched quantity as a good proxy for metered quantity?

GridBeyond has the view that 12 months is an appropriate period of time to assess effectiveness. Performance monitoring by the TSOs already takes place on a continuous basis as mentioned above.

Question 4: In stakeholders' views, what would be deemed as satisfactory or unsatisfactory effectiveness of outcomes for a DSU operating in the market in phase 1 to aid the SEMC's assessment?

The structure and proposal of Phase 1 are a continuation of the measures currently in place under the interim solution and monitoring these, as is done currently, is a reasonable means of assessing the operation of the proposed solution. The solution for energy payments is a welcome step forward, however other significant barriers to demand side participation remain and it would be unfair to link energy payments and the "level" of participation (however defined) without also taking steps to resolve the wider issues.

We reiterate the statements of DRAI and that it is important that appropriate monitoring and assessment measures are put in place that demonstrate the effectiveness of the assessment mechanism and encourage any laggards to improve performance rather than punish satisfactory performers for the underperformance of other Units.

Question 5: Are there any other elements than those suggested which need to be included in the review of phase 1 to allow conclusion to be reached on feasibility to continue with 'phase 1' before phase 2 goes live?

We have nothing further to recommend but do encourage the RAs to put in place a mechanism which takes the positive elements of the current performance monitoring arrangements and seeks to improve them, with fair and transparent means of assessing both the performance monitoring mechanism, as well as the dispatch performance of individual units operating in the market.

Question 6: The SEMC welcomes views on the introduction of a new Generator Performance Incentive (GPI) to apply to DSUs if Phase 1 continues beyond the first twelve months (ie. after review has evidenced its effectiveness) until Phase 2 is implemented.

GridBeyond supports the introduction and welcomes further discussion on the introduction of a GPI. The initial 12 month assessment period should provide the opportunity to identify if such a GPI is required, in relation to the effectiveness of dispatched quantity as a proxy for metered quantity and the performance of DSUs when dispatched in the energy market. Any proposed GPI should enhance performance metrics which could work to encourage and demonstrate good performance by DSUs. It will also further enable differentiation between DSU providers.

Question 7: Do stakeholders have a view on the extent of industry code or system modifications/ time involved to develop and implement phase 2?

GridBeyond has no view on the extent of code or system modifications required to implement Phase 2.

Question 8: The SEMC welcomes views on 'phase 2' being an 'enduring solution' if/once implemented.

We acknowledge that the Phase 2 enduring solution will involve moving from a socialised cost among suppliers (via the Imperfections Charge) to the more specific "perimeter correction" of volumes for all parties. This will require complex systems, rules changes across wholesale and retail markets and extensive collaboration between all relevant parties.

The relationships between Individual Demand Sites (IDS), retail suppliers and DSU aggregators requires careful consideration as part of the design of the enduring solution for energy payments for DSUs. In addition, there will be considerable impacts on retail as well as wholesale market systems and data. Phase 2 should also have an assessment phase similar to Phase 1 of the proposal prior to the establishment of an enduring solution.

Question 9: Do stakeholders have any concerns with either phase regarding accommodating the different types of demand response?

Various units provide a unique type of service to the power system e.g. 'Long Run' DSUs are units which consist of controllable behind the meter assets such as Combined Heat and Power (CHP) units, which can run continuously for long periods of time to meet on-site demand. Any market code and settlement algebra developed for the energy payments solution should be mindful of these kinds of units and not inadvertently trigger energy payments when these units are instructed by the system operator to turn back down / increase on-site generation.

Furthermore, many DSUs are contracted to provide services under the DS3 arrangements, which will result in changes to their observed demand patterns. These scenarios need to be accounted for when assessing DSU performance against energy market dispatch, particularly when service delivery coincides with energy market dispatch, so that units are not unfairly penalised for providing contracted system services.

Question 10: All other stakeholders' views are welcomed.

We reiterate the statements of DRAI and the design for energy payments for DSUs should respect the following principles;

- There should be no regressive steps in terms of cost and complexity which would increase barriers to participation for DSUs;
- The aim of the solution should be to resolve the known market design issues around energy payments which disincentivise DSU participation;
- The solution should allow for fair compensation of DSUs for dispatch, in line with treatment of non-DSU units;
- The solution should recognise the technical and market characteristics of DSUs as a technology type and develop a technology-inclusive design

The points we have raised in this response have adhered to these principles and we believe it is important that such a set of guiding principles is applied to the further development of the phased solution.

Conclusion

GridBeyond thanks the SEM Committee for the opportunity to provide feedback on this topic. We welcome the efforts for an enduring solution of energy payments for DSUs. We are available to discuss any of the points made above in more detail should you require.

Kind Regards,

Laura Leonard

Regulatory and Market Lead, Ireland